

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Lawrence E. Russ (Reg No. 35,342) on September 24, 2009.

The application has been amended as follows:

14. (currently amended) A radio communication apparatus operating in at least one of a plurality of wireless networks that co-exist, at least in part, in a common radio communication environment, the radio communication apparatus comprising:

beacon information receiving means for receiving first beacon information located in a predetermined beacon information receiving time interval from a first control station of a first one of the plurality of wireless networks;

**Deleted:** located in a predetermined beacon information receiving range

beacon information detecting means for detecting second beacon information from a second control station of a second one of the plurality of wireless networks;

collision detecting means for detecting whether the first beacon information collides with the second beacon information; and

interference informing means for notifying the first control station of the first network of a beacon information collision detection result,

wherein the beacon information detecting means sets a predetermined time in the predetermined beacon information receiving time interval to detect the second beacon information received from the second control station of the second network.

Deleted: range

16. (currently amended) A radio communication apparatus operating in at least one of a plurality of wireless networks that co-exist, at least in part, in a common radio communication environment, the radio communication apparatus comprising:

beacon information receiving means for receiving first beacon information located in a predetermined beacon information receiving time interval from a first control station of a first one of the plurality of wireless networks;

Deleted: located in a predetermined beacon information receiving range

beacon information detecting means for detecting second beacon information from a second control station of a second one of the plurality of wireless networks;

collision detecting means for detecting whether the first beacon information collides with the second beacon information; and

interference informing means for notifying the first control station of the first network of a beacon information collision detection result,

wherein the interference informing means notifies the first control station of the first network of the beacon information collision detection result using a management time slot allocated to the first control station of the first network so that a succeeding superframe period is adjusted based on the notification.

17. (currently amended) A radio communication method carried out in a radio communication apparatus operating in at least one of a plurality of wireless networks that co-exist, at least in part, in a common radio communication environment, the method comprising:

a beacon information receiving step for receiving first beacon information located in a predetermined beacon information receiving time interval from a first control station of a first one of the plurality of wireless networks;

**Deleted:** located in a predetermined beacon information receiving range

a beacon information detecting step for detecting second beacon information from a second control station of a second one of the plurality of wireless networks;

a collision detecting step for detecting whether the first beacon information collides with the second beacon information; and

an interference informing step for notifying the first control station of the first network of a beacon information collision detection result,

wherein the beacon information detecting step sets a predetermined time in the predetermined beacon information receiving time interval to detect the second beacon information received from the second control station of the second network.

Deleted: range

19. (currently amended) A radio communication method carried out in a radio communication apparatus operating in at least one of a plurality of wireless networks that co-exist, at least in part, in a common radio communication environment, the method comprising:

a beacon information receiving step for receiving first beacon information located in a predetermined beacon information receiving time interval from a first control station of a first one of the plurality of wireless networks;

Deleted: located in a predetermined beacon information receiving range

a beacon information detecting step for detecting second beacon information from a second control station of a second one of the plurality of wireless networks;

a collision detecting step for detecting whether the first beacon information collides with the second beacon information; and

an interference informing means for notifying the first control station of the first network of a beacon information collision detection result,

wherein the interference informing step notifies the first control station of the first network of the beacon information collision detection result using a

management time slot allocated to the first control station of the first network so that a succeeding superframe period is adjusted based on the notification.

21. (currently amended) A computer readable medium storing a computer program having instructions for carrying out a radio communication method in a radio communication apparatus operating in at least one of a plurality of wireless networks that co-exist, at least in part, in a common radio communication environment, the method comprising:

receiving first beacon information located in a predetermined beacon information receiving time interval from a first control station of a first one of the plurality of wireless networks;

Deleted: located in a predetermined beacon information receiving range

detecting means for detecting second beacon information from a second control station of a second one of the plurality of wireless networks;

detecting whether the first beacon information collides with the second beacon information; and

notifying the first control station of the first network of a beacon information collision detection result,

wherein the beacon information detecting means sets a predetermined time in the predetermined beacon information receiving time interval to detect the second beacon information received from the second control station of the second network.

Deleted: range

24. (currently amended) A computer readable medium storing a computer program having instructions for carrying out a radio communication method in a radio communication apparatus operating in at least one of a plurality of wireless networks that co-exist, at least in part, in a common radio communication environment, the method comprising:

a beacon information receiving step for receiving first beacon information located in a predetermined beacon information receiving time interval from a first control station of a first one of the plurality of wireless networks;

**Deleted:** located in a predetermined beacon information receiving range

a beacon information detecting step for detecting second beacon information from a second control station of a second one of the plurality of wireless networks;

a collision detecting step for detecting whether the first beacon information collides with the second beacon information; and

an interference informing step for notifying the first control station of the first network of a beacon information collision detection result,

wherein the interference informing step notifies the first control station of the first network of the beacon information collision detection result using a management time slot allocated to the first control station of the first network so that a succeeding

superframe period is adjusted based on the notification.

2. The following is an examiner's statement of reasons for allowance:

With regard to claims 2,8,20, the prior art of record fails to anticipate or make obvious a radio communication apparatus, method and computer readable medium storing a computer program "... setting a transmission frame period of the given wireless network and *transmitting at a predetermined time within the transmission frame period*, beacon information regarding resource allocation; ... detecting whether the given wireless network interferes with another one of the plurality of wireless networks; and ... *setting, upon detection of interference between the given wireless network and the another wireless network, a buffer frame period that is of different length than the transmission frame period to change a timing of the transmission frame period*, wherein ... detecting interference of the beacon information of the given wireless network *based on parameters obtained by receiving further beacon information received from the another wireless network*" (with emphasis).

With regard to claims 14,17,21, the prior art of record fails to anticipate or make obvious a radio communication apparatus comprising: "receiving means for receiving first beacon information *located in a predetermined beacon information receiving time interval* from a first control station of a first ... of the plurality of

wireless networks; ... detecting means for detecting second beacon information *[not necessarily located in the predetermined beacon information receiving time interval]* from a second control station of a second ... of the plurality of wireless networks; collision detecting means for detecting whether the first beacon information collides with the second beacon information; and interference informing means for notifying the first control station of the first network of a beacon information collision detection result, *wherein the beacon information detecting means sets a predetermined time in the predetermined beacon information receiving time interval to detect the second beacon information ....*" (with emphasis).

With regard to claims 16,19,24, the prior art of record fails to anticipate or make obvious a radio communication apparatus comprising: "... receiving means for receiving first beacon information *located in a predetermined beacon information receiving time interval* from a first control station of a first ... of the plurality of wireless networks; ... detecting means for detecting second beacon information *[not necessarily located in the predetermined beacon information receiving time interval]* from a second control station of a second ... of the plurality of wireless networks; collision detecting means for detecting whether the first beacon information collides with the second beacon information; and interference informing means for notifying the first control station of the first network of a beacon information collision detection result, *wherein the interference information means notifies the first control station ... of the beacon*



*information collision detection result using a management time slot [in a superframe period] allocated to the first control station of the first network so that a succeeding superframe period is adjusted based on the notification."* (with emphasis).

With regard to claim 22, the prior art of record fails to anticipate or make obvious a radio communication system comprising: "a plurality of wireless networks, each one of the plurality of wireless networks including an associated plurality of radio communication apparatuses and an associated control station, the associated control station being operable to allocate a resource to each associated radio communication apparatus of that wireless network in an associated transmission frame period and to transmit a beacon signal at a predetermined timing within the associated transmission frame period, wherein upon detection of interference between at least two of the plurality of wireless networks, a buffer frame period having a different length than the associated transmission frame period is set temporarily in one of the at least two wireless networks to prevent a collision between a first beacon signal transmitted by a first control station associated with the one of the at least two wireless networks and a second beacon signal transmitted by a second control station associated with another of the at least two wireless networks, the buffer frame period adjusting a length of an interval between the first beacon signal and the second beacon signal."

With regard to claim 23, the prior art of record fails to anticipate or make obvious a radio communication system comprising: "a plurality of wireless networks, each one of the plurality of wireless networks including an associated plurality of radio communication apparatuses and an associated control station, the associated control station being operable to allocate a resource to each associated radio communication apparatus of that wireless network in an associated transmission frame period, the associated frame period including a non-competitive transmission field; wherein upon detection of interference between at least two of the plurality of wireless networks, a buffer frame period having a different length than the associated transmission frame period is set temporarily in one of the at least two wireless networks to prevent competition between a first non-competitive transmission field of a first transmission frame period associated with the one of the at least two wireless networks and a second non-competitive transmission field of a second transmission frame period associated with another of the at least two wireless networks, the buffer frame period adjusting a positional relationship between a timing of the first transmission frame period and a timing of the second transmission frame period."

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Art Unit: 2419

### ***Conclusion***

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BLANCHE WONG whose telephone number is (571)272-3177. The examiner can normally be reached on Monday through Friday, 830am to 530pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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September 21, 2009  
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